

In the Claims:

Please cancel claims 1-26 without prejudice or disclaimer and add the following new claims 27-43 as follows:

1-26. (Cancelled)

27. (New) An isolated C140 receptor polypeptide encoded by a nucleic acid molecule which hybridizes under stringent conditions to a nucleic acid molecule selected from the group consisting of: (a) a nucleic acid molecule complimentary to SEQ ID NO:1, (b) a nucleic acid molecule complimentary to SEQ ID NO:3, (c) a nucleic acid molecule complimentary to SEQ ID NO: 60, and (d) a nucleic acid molecule complimentary to SEQ ID NO: 62, wherein the stringent conditions are: (1) hybridization in 50% (vol/vol) formamide with 0.1% bovine serum albumin, 0.1% Ficoll, 0.1% polyvinylpyrrolidone, 50 mM sodium phosphate buffer at pH 6.5 with 750 mM NaCl and 75 mM sodium citrate at 42°C; or (2) hybridization in 50% formamide, 5 X SSC (750 mM NaCl, 75 mM sodium citrate), 50 mM sodium phosphate (pH 6.8), 0.1% sodium pyrophosphate, 5 X Denhardt's solution, sonicated salmon sperm DNA (50 :g/ml), 0.1% SDS, and 10% dextran sulfate at 42°C, with washes at 42°C in 0.2 X SSC and 0.1% SDS or with washes at 50°C in 15 mM NaCl, 1.5 mM sodium citrate, and 0.1% sodium dodecyl sulfate.

28. (New) An isolated polypeptide of claim 27, wherein the polypeptide comprises at least about 75% amino acid sequence identity with any one of SEQ ID NOS: 2, 4, 61, or 63.

29. (New) An isolated polypeptide of claim 27 encoded by a nucleic acid molecule comprising nucleotides 232-1416 of SEQ ID NO: 1.

30. (New) An isolated polypeptide of claim 27 encoded by a nucleic acid molecule comprising nucleotides 56-1249 of SEQ ID NO: 3.

31. (New) An isolated polypeptide of claim 27 encoded by a nucleic acid molecule comprising nucleotides 73-1269 of SEQ ID NO: 60.

32. (New) An isolated polypeptide of claim 27 encoded by a nucleic acid molecule comprising nucleotides 50-1240 of SEQ ID NO: 62.

33. (New) An isolated polypeptide of claim 27, wherein the polypeptide is selected from the group consisting of SKGRSLIGRLET (SEQ ID NO: 19), ISYHLHGNNWVYGEALC (SEQ ID NO: 20), QTIYIPALNITTCHDVLPEEVLVGDMFNYFL (SEQ ID NO: 21), and HYFLIKTQRQSHVYA (SEQ ID NO: 22).

34. (New) An isolated polypeptide of claim 27, comprising amino acids 1-34 of SEQ ID NO: 2, amino acids 1-37 of SEQ ID NO: 4, amino acids 1-38 of SEQ ID NO: 61 or amino acids 1-36 of SEQ ID NO: 63.

35. (New) An isolated polypeptide of claim 27, comprising amino acids 28-34 of SEQ ID NO: 2, amino acids 31-37 of SEQ ID NO: 4, amino acids 32-38 of SEQ ID NO: 61 or amino acids 30-36 of SEQ ID NO: 63.

36. (New) An isolated polypeptide of claim 27, wherein the polypeptide is an agonist of C140 receptor induced Ca^{2+} release.

37. (New) An isolated polypeptide of claim 27, wherein the polypeptide is an antagonist of C140 receptor induced Ca^{2+} release.

38. (New) An isolated polypeptide of either of claims 36 or 37, wherein the polypeptide comprises at least 75% amino acid sequence identity to the N-terminal end of the activated C140 receptor.

39. (New) An isolated polypeptide of either of claims 36 or 37, wherein the polypeptide comprises at least 90% amino acid sequence identity to the N-terminal end of the activated C140 receptor.

40. (New) An isolated polypeptide of either of claims 36 or 37, wherein the polypeptide comprises at least 95% amino acid sequence identity to the N-terminal end of the activated C140 receptor.

41. (New) An isolated polypeptide of claim 37, wherein the polypeptide lacks the N-terminal Serine of the activated C140 receptor.

42. (New) An isolated C140 agonist peptide encoded by a nucleic acid molecule which hybridizes under stringent conditions to a nucleic acid molecule selected from the group consisting of: (a) a nucleic acid molecule complimentary to SEQ ID NO:1, (b) a nucleic acid molecule complimentary to SEQ ID NO:3, (c) a nucleic acid molecule complimentary to SEQ ID NO: 60, and (d) a nucleic acid molecule complimentary to SEQ ID NO: 62, wherein the stringent conditions are: (1) hybridization in 50% (vol/vol) formamide with 0.1% bovine serum albumin, 0.1% Ficoll, 0.1% polyvinylpyrrolidone, 50 mM sodium phosphate buffer at pH 6.5 with 750 mM NaCl and 75 mM sodium citrate at 42°C; or (2) hybridization in 50% formamide, 5 X SSC (750 mM NaCl, 75 mM sodium citrate), 50 mM sodium phosphate (pH 6.8), 0.1% sodium pyrophosphate, 5 X Denhardt's solution, sonicated salmon sperm DNA (50 :g/ml), 0.1% SDS, and 10% dextran sulfate at 42°C, with washes at 42°C in 0.2 X SSC and 0.1% SDS or with washes at 50°C in 15 mM NaCl, 1.5 mM sodium citrate, and 0.1% sodium dodecyl sulfate.

43. (New) An isolated C140 antagonist peptide encoded by a nucleic acid molecule which hybridizes under stringent conditions to a nucleic acid molecule selected from the group consisting of: (a) a nucleic acid molecule complimentary to SEQ ID NO:1, (b) a nucleic acid molecule complimentary to SEQ ID NO:3, (c) a nucleic acid molecule complimentary to SEQ ID NO: 60, and (d) a nucleic acid molecule complimentary to SEQ ID NO: 62, wherein the stringent conditions are: (1) hybridization in 50% (vol/vol) formamide with 0.1% bovine serum albumin, 0.1% Ficoll, 0.1% polyvinylpyrrolidone, 50 mM sodium phosphate buffer at pH 6.5 with 750 mM NaCl and 75 mM sodium citrate at 42°C; or (2) hybridization in 50% formamide, 5 X SSC (750 mM NaCl, 75 mM sodium citrate), 50 mM sodium phosphate (pH 6.8), 0.1% sodium pyrophosphate, 5 X Denhardt's solution, sonicated salmon sperm DNA (50 :g/ml), 0.1% SDS, and 10% dextran sulfate at 42°C, with washes at 42°C in 0.2 X SSC and 0.1% SDS or with washes at 50°C in 15 mM NaCl, 1.5 mM sodium citrate, and 0.1% sodium dodecyl sulfate.